UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P. D. Rey. 1450

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

21171 7590 03/27/2008

STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005

LP SMITS, TALIVALDIS IYARS

ART UNIT PAPER ?

EXAMINER

SMITS, TALIVALDIS IVARS

ART UNIT PAPER NUMBER

2606

DATE MAILED: 03/27/2008

 APPLICATION NO.
 FILING DATE
 HIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFERMATION NO.

 10601,822
 06/24/2003
 Toru I wamnoto
 1046.1294
 9083

 TITLE OF INVESTION: CONTROL SYSTEM
 400.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000
 100.0000

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	06/27/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed other ions.	or transmitting the I ng the Patent, advanc nerwise in Block 1, b	SSUE FEE and PUBLICA te orders and notification of by (a) specifying a new con-	TION FEE (if req f maintenance fees respondence addres	uired). I will be s; and/o	Blocks 1 through 5 s mailed to the current r (b) indicating a sepa	hould be completed where correspondence address as arate "FEE ADDRESS" for
TRANSPORTED TO THE AUTORISS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
	K AVENUE, N.W		T	Co	rtificat	e of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
WASHINGTON	, DC 20005						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR .	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/601,822 TITLE OF INVENTION	06/24/2003 CONTROL SYSTEM	·	Toru Iwamoto			1046.1294	9083
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISS	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	06/27/2008
EXAM	INER	ART UNIT	CLASS-SUBCLASS	٦			
SMITS, TALIV	ALDIS IVARS	2626	704-275000	_			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA	nge of Correspondence  "Indication form the ded. Use of a Custom  A TO BE PRINTED C	ce or agents OR, alterna (2) the name of a sin	to 3 registered pate tively, agle firm (having as a agent) and the nat dorneys or agents. I be printed.	a memb nes of u f no nan	per a 2proto	ocument has been filed for
(A) NAME OF ASSIC	SNEE		(B) RESIDENCE: (CI	TY and STATE OR	COUN	TRY)	oup entity Government
4a. The following fee(s) a  Issue Fee Publication Fee (N Advance Order - #	o small entity discount p	permitted)	4b. Payment of Fee(s): (Pl A check is enclosed Payment by credit of The Director is here overpayment, to De	L ard. Form PTO-20: by authorized to ch	8 is atta	ached. required fee(s), any de	
	SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no le	onger claiming SM/	LLEN	TITY status. Sec 37 C	FR 1.27(g)(2).
interest as shown by the r	ecords of the United Sta	tes Patent and Traden	epted from anyone other that nark Office.	n tne appucant; a re	gisterea	attorney or agent; or ti	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration			
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	ER 1.311. The inform U.S.C. 122 and 37 C USPTO. Time will rden, should be sent to NOT SEND FEES O	nation is required to obtain of EFR 1.14. This collection is vary depending upon the inco the Chief Information Off OR COMPLETED FORMS	r retain a benefit by estimated to take 12 lividual case. Any o icer, U.S. Patent and TO THIS ADDRES	the pub minute commen 1 Trader S. SEN	lic which is to file (an s to complete, includir ts on the amount of ti nark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/601,822		06/24/2003	Toru Iwamoto	1046.1294	9083	
21171	7590	03/27/2008		EXAM	UNER	
STAAS & HALSEY LLP				SMITS, TALIVALDIS IVARS		
SUITE 700				ART UNIT	PAPER NUMBER	
1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				2626 DATE MAILED: 03/27/200	8	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 734 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 734 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)
10/601,822	IWAMOTO ET AL.
Examiner	Art Unit
Taliyaldie lyare Smite	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to RCE, filed 1/14/2008.
- The allowed claim(s) is/are 1,2,5-11 and 14-19.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 

    All b) 

    Some\* c) 

    None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Page 2

Application/Control Number: 10/601,822

Art Unit: 2626

### DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/14/2008 has been entered.
- Applicant has amended independent claims 1, 5, 10, 11, and 14, and cancelled claims 3 and 12 without prejudice or disclaimer. This has placed the application in position for allowance, with an Examiner's Amendment to the Title, next, for reasons given below.

### Examiner's Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In the Title:

Application/Control Number: 10/601,822 Page 3

Art Unit: 2626

In the Title, after "Control system", add the following -- outputting received speech with display of a predetermined effect or image corresponding to its ambient noise power spectrum --.

In the Abstract:

Replace the current Abstract with the following:

-- A control system receiving an input signal, comprising speech with ambient noise, determines the ambient noise power spectrum, retrieves control information corresponding to the closest-matching ambient noise power spectrum, and outputs the input signal along with display of a predetermined effect or image corresponding to the ambient noise power spectrum. --

## Allowable Subject Matter

- 4. Claims 1, 2, 5-11, and 14-19 are allowed over the prior art of record. The following is an examiner's statement of reasons for allowance:
- 5. Independent claims 1, 10, and 19 are allowed because the prior art of record does not teach nor fairly suggest that a received sound input, consisting of speech and ambient noise, which input is subsequently output without change, be supplemented at the output with a displayed image or predetermined effect, wherein the displayed image or predetermined effect corresponds to the best match of the ambient noise power

Page 4

Application/Control Number: 10/601,822

Art Unit: 2626

spectrum to a set of predetermined model power spectra, each said power spectrum being associated with an image or predetermined effect.

Dependent claims 2, 5-10, and 14-18 are allowed because they further limit their respective independent claims.

### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Talivaldis Ivars Smits whose telephone number is 571-272-7628. The examiner can normally be reached on 8:25 a.m. to 4:55 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/601,822 Page 5

Art Unit: 2626

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

3/21/2008

/Talivaldis Ivars Smits/ Primary Examiner, Art Unit 2626

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.